

Application No. 10/822,642

REMARKS

Claims 20, 22-26, 28-43 are pending. By this Amendment, claims 12-19 are cancelled, claims 20, 22-23, 29-31 and 35 are amended, and new claims 39-43 are added. Applicants note that a greater number of claims were canceled than added.

Claims 20 and 31 have been amended to more particularly point out Applicants' claimed invention. In particular, claim 20 was amended for clarity and to remove a feature objected to by the Examiner. The amendment of claim 31 is supported in the specification, for example, at page 2, lines 14-20, and page 36, line 18 - page 37, line 7, and page 40, lines 16-25. Claims 22-23, 29-30 and 35 have been amended for purposes of proper dependency. No new matter is introduced by the amendments.

New claim 39 is supported in the specification, for example, at page 2, lines 14-20 and page 5, line 15 - page 6, line 3. New claims 40-43 are supported in the specification, for example, at page 60, line 25 - page 61, line 5. No new matter is introduced by the new claims.

All pending claims stand rejected. Applicants respectfully request reconsideration of the rejections based on the following analysis.

Rejection under 35 U.S.C. § 112, First Paragraph

The Examiner rejected claims 20, 22-26, 28-30, and 35 under 35 U.S.C. § 112, first paragraph, as failing to satisfy the written description requirement. Specifically, the Examiner asserted that the claimed powder metal coating formed in a flowing reactor was not supported by the specification. While Applicants respectfully disagree with the Examiner's position on these issues, they are presently moot since Applicants have amended claims 20 (from which claims 22-26 and 28-30 depend) and 31 (from which claim 35 depends) to remove the language objected to by the Examiner. In view of the amendments, the issues raised by the Examiner are moot, and

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Applicants respectfully request withdrawal of the rejection of 20, 22-26, 28-30 and 35 under 35 U.S.C. § 112, first paragraph.

Rejection Over Hicks under 35 U.S.C. § 102

The Examiner rejected claims 31-32 and 36-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,749,396 to Hicks (Hicks). Applicants incorporate by reference their comments from the Amendment of September 8, 2005. In addition, to advance prosecution of the case, Applicants have amended claim 31 to more particularly point out their claimed invention. Since Hicks clearly does not teach all features of the claims, Hicks does not prima facie anticipate Applicants' claimed invention. Applicants respectfully request reconsideration of the rejection based on the following comments.

Hicks does not do not teach or suggest all of the features included in claim 31, as amended. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Specifically, Hicks does not disclose forming a powder coating on an insert in a flowing reactor by placing the insert in a product stream of the flowing reactor, wherein the reaction to form the product stream is driven by a light beam intersecting a reactant stream.

As such, because Hicks does not teach or suggest all of the limitations of claim 31, Hicks does not prima facie anticipate claim 31 or the claims depending therefrom. Applicants respectfully request withdrawal of the rejection of claims 31-32 and 36-38 under 35 U.S.C. § 102(b) as being anticipated by Hicks.

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Rejection Over Hicks, Sarkar, Miller, and Schultz under 35 U.S.C. § 103(a)

The Examiner rejected claims 33-34 under 35 U.S.C. § 103(a) as being unpatentable over Hicks as applied to claim 31, and further in view of U.S. Patent No. 4,599,098 to Sarkar (Sarkar), U.S. Patent No. 4,501,602 to Miller, et al. (Miller), and optionally U.S. Patent No. 4,263,031 to Schultz (Schultz). Applicants incorporate by reference their comments from the Amendment of September 8, 2005. In addition, Applicants have amended claim 31 to more particularly point out their claimed invention. Applicants respectfully request reconsideration of the rejection in view of the following comments.

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." MPEP § 2142 (citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

Since the cited references do not teach or suggest all of the features included in independent claim 31, as amended, the references do not render Applicants' claimed invention in claims 33-34 prima facie obvious. Prima facie obviousness is not established if all the elements of the rejected claim are not disclosed or suggested in the cited art. In re Ochiai, 37 USPQ 1127, 1131 (Fed. Cir. 1995). ("The test for obviousness *vel non* is statutory. It requires that one compare the claim's 'subject matter as a whole' with the prior art 'to which said subject matter pertains.'"). See also, MPEP § 2143.03 "All Claim Limitations Must Be Taught or Suggested," citing In re Royka, 180 USPQ 580 (CCPA 1974). "To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP § 2143.03.

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As stated above, Hicks does not do not teach or suggest all of the features included in claim 31, as amended. Sarkar, Miller, and Schultz do not make up for this deficiency. Specifically, none of the cited references disclose forming a powder coating on an insert in a flowing reactor by placing the insert in a product stream of the flowing reactor, wherein the reaction to form the product stream is driven by a light beam intersecting a reactant stream.

With respect to specific features noted by the Examiner in claims 33-34, these issues are not commented on further here because they are presently moot given the above analysis, although Applicants do not acquiesce in the Examiner's position. See MPEP § 2143.03 ("If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious.") Since Hicks, Sarkar, Miller, and Schultz do not render Applicants' claimed invention prima facie obvious, Applicants respectfully request withdrawal of the rejection of claims 33-34 as being unpatentable over Hicks, Sarkar, Miller, and Schultz.

Rare Earth Metal

The Examiner has asserted that "rare earth metal" encompasses only elemental metals and not metal oxides. It was clear that Applicants intended "rare earth metal" to cover compounds with rare earth metal elements, such that the compounds could be elemental rare earth metal, rare earth metal oxides, or other rare earth metal compounds. See, e.g., Application, page 7, lines 18-20 ("In general, the inorganic particles generally comprise metal and/or metalloid elements in their elemental form and/or in compounds."). In addition, Applicants made it clear in their Amendment of September 8, 2005 that "rare earth metal" encompasses compounds with rare earth metal elements, such as, for example, rare earth metal oxides. See September 8, 2005 Amendment, page 12. In view of the amendments of claim 20, Applicants believe that the scope is clear. Applicants respectfully request that the Examiner call Applicants' undersigned

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representative if the Examiner maintains that the claim language covers different subject matter than is asserted by Applicants.

New Claims

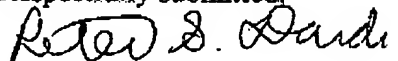
Dependent claim 39 has been added. None of the cited references, alone or combined, teach, suggest, or motivate a method for forming an optical fiber preform, the method comprising inserting a coated insert within a glass preform structure, the coated insert comprising a rare earth metal powder coating that was formed in a flowing reactor by placing an insert in a product stream of the flowing reactor, as required by claim 39. Dependent claims 40-43 have also been added. None of the cited references, alone or combined, teach, suggest, or motivate a method for forming an optical fiber preform, the method comprising inserting a coated insert within a glass preform structure, the coated insert comprising the relative densities as required by claims 40-43. As such, Applicants respectfully request favorable consideration and prompt allowance of new claims 39-43.

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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